

Listing Of Claims

1. (Currently Amended) A composition for producing a polyurethane foam, the composition comprising a polyol, a polyisocyanate, a blowing agent comprising a hydrohalocarbon, and at least 4 pphp of a blowing agent enhancer comprising at least one compound selected from the group consisting of ethylene glycol monomethyl ether, ethylene glycol monobutyl ether, ethylene glycol phenyl ether, diethylene glycol monomethyl ether, propylene glycol monomethyl ether, propylene glycol monomethyl ether acetate, propylene glycol monopropyl ether, propylene glycol monobutyl ether, dipropylene glycol dimethyl ether, dipropylene glycol monomethyl ether, dipropylene glycol monopropyl ether, dipropylene glycol monobutyl ether, tripropylene glycol monopropyl ether, tripropylene glycol monobutyl ether, or a mixture of any of these.

2. (Withdrawn) A composition for producing a polyurethane foam, the composition comprising a polyol, a polyisocyanate, a blowing agent comprising a hydrohalocarbon, and a blowing agent enhancer comprising at least one compound having no hydroxyl groups and having a molecular weight less than about 500 g/mol and a molecular formula of $\text{RO}-(\text{CH}_2\text{CHR}''\text{O})_n-\text{R}'$; wherein:

R is selected from the group consisting of C1-C10 aliphatic groups, C5-C10 cycloaliphatic groups, C7-C10 araliphatic groups, C1-C10 aliphatic groups comprising a nitrogen atom or oxygen atom, C5-C10 cycloaliphatic groups comprising a nitrogen atom or oxygen atom, and C7-C10 araliphatic groups comprising a nitrogen atom or oxygen atom;

R' is selected from the group consisting of R, acetyl, propionyl, and butyryl, provided that R' is not a C1-C10 aliphatic group;

R'' is hydrogen or a C1-C5 alkyl group; and

n is an integer greater than or equal to 1.

3. (Withdrawn) The composition of claim 2, wherein R'' is hydrogen or methyl.

4. (Withdrawn) The composition of claim 1, wherein the at least one compound comprises dipropylene glycol dimethyl ether.

5. (Withdrawn) The composition of claim 1, wherein the at least one compound comprises propylene glycol monomethyl ether, propylene glycol monopropyl ether, propylene glycol monobutyl ether, or a mixture of any of these.

6. (Previously Presented) The composition of claim 1, wherein the at least one compound comprises ethylene glycol monobutyl ether.

7. (Original) The composition of claim 1, wherein the hydrohalocarbon comprises at least one fluorine atom per molecule.

8. (Original) The composition of claim 1, wherein the blowing agent comprises HCFC-123, HCFC-141b, HCFC-22, HCFC-142b, HFC-134a, HFC-245fa, HFC-245ca, HFC-236ea, HFC-365mfc, or a mixture of any of these.

9. (Original) The composition of claim 1, wherein the blowing agent comprises HCFC-141b, HFC-134a, HFC-245fa, or a mixture of any of these.

10. (Original) The composition of claim 1, wherein the blowing agent comprises a C1-C4 hydrofluorocarbon having a molecular weight between 50 and 170 g/mol, a boiling point between -60°C and 50°C, and an Ozone Depletion Potential less than 0.10.

11. (Original) The composition of claim 1, wherein the blowing agent comprises HFC-134a, HFC-236ea, HFC-365mfc, HFC-245fa, or a mixture of any of these.

12. (Original) The composition of claim 1, wherein the blowing agent comprises HFC-245fa.

13. (Original) The composition of claim 1, additionally comprising a catalyst.

14. (Original) The composition of claim 1, additionally comprising a surfactant.

15. (Currently Amended) A composition for producing a polyurethane foam, the composition comprising a polyol, a polyisocyanate, HFC-245fa, and at least 4 pphp in total of one or both of ethylene glycol monobutyl ether and dipropylene glycol dimethyl ether.

16. (Currently Amended) A method of making a polyurethane foam, the method comprising combining a polyol and a polyisocyanate in the presence of 1) a blowing agent comprising a hydrohalocarbon and 2) at least 4 pphp of a blowing agent enhancer comprising at least one compound selected from the group consisting of ethylene glycol monomethyl ether, ethylene glycol monobutyl ether, ethylene glycol phenyl ether, diethylene glycol monomethyl ether, propylene glycol monomethyl ether, propylene glycol monomethyl

ether acetate, propylene glycol monopropyl ether, propylene glycol monobutyl ether, dipropylene glycol dimethyl ether, dipropylene glycol monomethyl ether, dipropylene glycol monopropyl ether, dipropylene glycol monobutyl ether, tripropylene glycol monopropyl ether, tripropylene glycol monobutyl ether.

17. (Original) The method of claim 16, wherein the hydrohalocarbon comprises at least one fluorine atom per molecule.

18. (Withdrawn) A composition for producing a polyurethane foam, the composition comprising a polyol, a polyisocyanate, a blowing agent comprising a hydrohalocarbon, and a blowing agent enhancer comprising at least one compound having a molecular weight less than about 500 g/mol and a molecular formula ROH, wherein:

R is selected from the group consisting of methyl, ethyl, pentyl isomers, hexyl isomers, heptyl isomers, octyl isomers, nonyl isomers, decyl isomers, C5-C10 cycloaliphatic groups, and C7-C10 araliphatic groups.

19. (Withdrawn) The composition of claim 18, wherein the hydrohalocarbon comprises at least one fluorine atom per molecule.

20. (Withdrawn) The composition of claim 18, wherein the at least one compound is selected from the group consisting of methanol, ethanol, isomers of pentanol, isomers of hexanol, isomers of heptanol, isomers of octanol, isomers of nonanol, isomers of decanol, and mixtures of any of these.

21. (Currently Amended) A polyurethane composition comprising a product of a reaction between a polyol and a polyisocyanate, the reaction taking place in the presence of 1) a blowing agent comprising a hydrohalocarbon and 2) at least 4 pphp of a blowing agent enhancer selected from the group consisting of ethylene glycol monomethyl ether, ethylene glycol monobutyl ether, ethylene glycol phenyl ether, diethylene glycol monomethyl ether, propylene glycol monomethyl ether, propylene glycol monomethyl ether acetate, propylene glycol monopropyl ether, propylene glycol monobutyl ether, dipropylene glycol dimethyl ether, dipropylene glycol monomethyl ether, dipropylene glycol monopropyl ether, dipropylene glycol monobutyl ether, tripropylene glycol monopropyl ether, tripropylene glycol monobutyl ether.

22. (Currently Amended) A composition for producing a polyurethane foam, the composition comprising 1) one but not both of a polyol and a polyisocyanate, 2) a blowing

agent comprising a hydrohalocarbon and 3) a blowing agent enhancer comprising at least one compound selected from the group consisting of ethylene glycol monomethyl ether, ethylene glycol monobutyl ether, ethylene glycol phenyl ether, diethylene glycol monomethyl ether, propylene glycol monomethyl ether, propylene glycol monomethyl ether acetate, propylene glycol monopropyl ether, propylene glycol monobutyl ether, dipropylene glycol dimethyl ether, dipropylene glycol monomethyl ether, dipropylene glycol monopropyl ether, dipropylene glycol monobutyl ether, tripropylene glycol monopropyl ether, tripropylene glycol monobutyl ether, wherein at least 4 pphp of the blowing agent enhancer is present if said one but not both of a polyol and a polyisocyanate is a polyol.

23. (Original) The composition of claim 22, wherein the hydrohalocarbon comprises at least one fluorine atom per molecule.

24. (Currently Amended) A composition for producing a polyurethane foam, the composition comprising a polyol, a polyisocyanate, a blowing agent comprising a hydrohalocarbon, and at least 4 pphp of a blowing agent enhancer comprising at least one compound selected from the group consisting of ethylene glycol monomethyl ether, ethylene glycol monobutyl ether, ethylene glycol phenyl ether, diethylene glycol monomethyl ether, propylene glycol monomethyl ether, propylene glycol monomethyl ether acetate, propylene glycol monopropyl ether, propylene glycol monobutyl ether, dipropylene glycol dimethyl ether, dipropylene glycol monomethyl ether, dipropylene glycol monopropyl ether, dipropylene glycol monobutyl ether, tripropylene glycol monopropyl ether, tripropylene glycol monobutyl ether and compounds having a molecular weight less than about 500 g/mol and a molecular formula of ROH; wherein:

R is selected from the group consisting of methyl, ethyl, pentyl isomers, hexyl isomers, heptyl isomers, octyl isomers, nonyl isomers, decyl isomers, C5-C10 cycloaliphatic groups, C7-C10 araliphatic groups, C1-C10 aliphatic groups comprising a nitrogen atom or oxygen atom, C5-C10 cycloaliphatic groups comprising a nitrogen atom or oxygen atom, and C7-C10 araliphatic groups comprising a nitrogen atom or oxygen atom.

25. (New) The composition of claim 1 comprising at least 5 pphp of the blowing agent enhancer.

26. (New) The composition of claim 15 comprising at least 5 pphp in total of the blowing agent enhancer.

27. (New) The method of claim 16 wherein the blowing agent enhancer is present in an amount of at least 5 pphp.
28. (New) The composition of claim 21 wherein the reaction takes place in the presence of at least 5 pphp of the blowing agent enhancer.
29. (New) The composition of claim 22 wherein the blowing agent enhancer is present in an amount of at least 5 pphp.
30. (New) The composition of claim 24 comprising at least 5 pphp of the blowing agent enhancer.